

The Environmental Law & Policy Center appreciates this opportunity to comment on the Illinois Power Agency's ("IPA") Draft 2012 Power Procurement Plan ("Draft Plan"). Our comments will focus on the IPA's plan for complying with the Illinois Solar Carve Out, established by 20 ILCS 3855/1-75 and will recommend a separate procurement program for procuring solar renewable energy credits (SRECs) from small and mid-size "distributed" solar resources. By diversifying the electricity supply portfolio and catalyzing development of an underused renewable resource, a distributed SREC procurement program will deliver multiple benefits for the state and promote the General Assembly's objectives.<sup>1</sup>

The 2012 Draft Plan improves upon the 2011 Procurement Plan for solar by including certain clarifications that will reduce uncertainty and allow for broader participation in the auction by developers of utility-scale solar energy projects. However, developers and owners of small and mid-size solar systems cannot functionally participate in the procurement process described in the Draft Plan. Bidding requirements are too complex and transaction costs are too high to justify participation for small projects. The Draft Plan does not include any alternative procurement events or programs that are designed to overcome these problems and obtain SRECs from small and mid-size distributed solar systems, i.e. systems that are interconnected to the electric distribution system in Illinois and located on the customer's side of the electric meter. This is a significant omission that should be remedied.

The IPA could procure SRECs from distributed solar systems at prices that are competitive with utility-scale auction clearing prices. Doing so would promote development of the residential and commercial solar rooftop market sector in Illinois and would yield a variety of benefits consistent with the goals of the IPA Act, including encouraging resource diversity,

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<sup>&</sup>lt;sup>1</sup> 20 ILCS 3855/1-5. Legislative Findings and Declarations.

advancing price competition and price stability, promoting investment and development, and avoiding the need for new generation, transmission, and distribution infrastructure.<sup>2</sup> Failing to do so will preclude the growth of private investment in this sector, deprive the electric system of significant and measurable benefits, and inhibit the development of a diverse, mature and sustainable solar industry in Illinois.

As explained in more detail below, the IPA should modify the Draft Plan to include language stating affirmatively that it will (1) create a procurement program for SRECs from distributed solar energy systems; (2) implement the program over multiple years to encourage sustainable, long-term growth of Illinois' solar industry; and (3) hold a series of workshops prior to June 2012 to seek stakeholder input on program features and implementation procedures.

#### I. **PLAN FAILS** TO PROVIDE PARTICIPATION BY DEVELOPERS OF DISTRIBUTED SOLAR PV

Section 1-20 of the IPA Act directs the Agency to "develop electricity procurement plans to ensure adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time, taking into account any benefits of price stability... These procurement plans shall be updated on an annual basis and shall include electricity generated from renewable resources sufficient to achieve the standards specified in this Act."<sup>3</sup>

The Illinois Renewable Portfolio Standard ("RPS") is located at Section 1-75(c) of the The RPS requires the IPA to procure "cost-effective renewable energy resources" Act. according to an increasing statutory schedule and includes a specific "carve-out" for both solar

<sup>&</sup>lt;sup>2</sup> 20 ILCS 3855/1-5. <sup>3</sup> 20 ILCS 3855/1-20(a).

and wind energy resources.<sup>4</sup> The Solar Carve Out requires that in 2012, 0.5% of renewable resources procured for RPS compliance must come from solar photovoltaics (PV). The requirement increases to 1.5% in 2013, 3% in 2014 and 6% in 2015. After that the minimum proportion of solar stays steady at 6%, but the overall renewable energy requirement continues to grow through 2025, so the amount of solar the IPA needs to comply with the Act continues to increase.

Procurement Year	Overall Standard (% of Retail Electric Sales to Come from Renewables)	Solar Requirement (% of the Standard)	% of Retail Electric Sales from Solar	
2012	7%	0.5%	0.0035%	
2013	8%	1.50%	0.120%	
2014	9%	3%	0.270%	
2015	10%	6%	0.600%	
2016	11.5%	6%	0.690%	
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2025	25%	6%	1.50%	

There is a large gap between the targets in the Solar Carve Out and the number of SRECs the IPA has procured to date. Given the Total Load data supplied in Attachment D (Ameren) and Attachment H (ComEd), the IPA's solar procurement obligation will quickly ramp up to approximately 277,707 MWh in Plan Year (PY) 2016, the end of the Draft Plan's planning period. This is equivalent to the annual production of approximately 211 MW of solar PV. Long-Term (20 year) Power Purchase Agreements (LTPPAs) for 31,316 MWh of solar energy plus SRECs were signed in December 2010, in fulfillment of the IPA's 2010 Procurement Plan approved by the ICC in December 2009. These contracts are expected to fully satisfy the IPA's

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<sup>&</sup>lt;sup>4</sup> 20 ILCS 3855/1-75(c).

<sup>&</sup>lt;sup>5</sup> Projected Total Load (ComEd and Ameren) is 40,247,456 MWh. The solar requirement is 0.69%, or 277,707 MWh, equivalent to the annual production of approximately 211 MW, assuming an average capacity factor of 15%.

2012 solar obligation and meet approximately 50% of the 2013 obligation. By PY 2016, however, SRECs delivered by these contracts will only represent about 11% of the IPA's overall solar obligation.<sup>6</sup>

In order to meet the RPS solar targets, various parties have called for a strategic, long-term solar procurement plan that includes a separate procurement program for distributed solar resources. *See*, *e.g.*, comments of the Environmental Law & Policy Center, Solar Alliance, and Vote Solar. In the July 13<sup>th</sup>, 2011 Reply Comments on the Spring 2011 Electric Procurement Events, ELPC repeated the need for design changes in future solar procurements. Specifically, ELPC posited that "the recent procurement experience also demonstrates the need for an additional procurement program that enables the IPA to purchase solar renewable energy credits (SRECs) from small and mid-size solar generation projects" and suggested "through benchmark pricing and longer-term, standardized contracts, [distributed generation] SRECs can be procured at reasonable costs and with reasonable administrative requirements."

The 2012 Draft Plan will reduce uncertainty and allow for broader participation in the renewable resources auction by developers of *utility-scale* solar energy projects, <sup>11</sup> but it fails to provide any opportunity for participation by developers of *distributed* solar PV. This is unfortunate because the market for distributed solar PV – particularly small and mid-size

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<sup>&</sup>lt;sup>6</sup> With the addition of the alternative retail electric suppliers' (ARES) solar obligation, we estimate that the annual output of approximately 750-800 MW of solar PV must be procured to comply with the Illinois Solar Carve Out in 2016. To offer a sense of scale, the total grid-connected solar PV capacity installed in the U.S. was 2.15 GW by the end of 2010. Sherwood, Larry, "US Solar Market Trends 2010." *The Interstate Renewable Energy Council*. Page 8. http://irecusa.org/wp-content/uploads/2011/07/IREC-Solar-Market-Trends-Report-revised070811.pdf

<sup>&</sup>lt;sup>7</sup> ELPC Comments on the IPA's 2011 Draft Procurement Plan (September 15, 2010).

<sup>&</sup>lt;sup>8</sup> Solar Alliance Comments on the IPA's 2011 Draft Procurement Plan (September 15, 2010).

<sup>&</sup>lt;sup>9</sup> Vote Solar Comments on the IPA's 2011 Draft Procurement Plan (September 14, 2010).

<sup>&</sup>lt;sup>10</sup> ELPC Comments on the Spring 2011 Electric Procurement Events at 1 and 5 (July 13<sup>th</sup>, 2011).

The 2012 Draft Plan improves upon the 2011 Procurement Plan for utility-scale solar in that it clarifies that (1) the Spring procurements will be conducted to "yield carve-out consistent contracts for solar and wind;" (2) multi-year bids (up to 20 years) from renewable generators will be considered; (3) bids will be sorted "according to price and source (solar, wind, etc.);" and (4) bids will be selected in a manner that yields at least the minimum carve out requirements, given the limitations of the Net Renewable Resources Budget (NRRB). IPA Draft Plan at 50.

rooftop PV – is an essential part of the record-breaking growth that the U.S. solar industry has experienced in recent years. In 2010 alone, the U.S. solar industry installed 890 MW of grid connected PV. More than two-thirds of these capacity additions – or 609 MW – were distributed systems installed on residential, commercial and industrial sites. 12 Distributed solar cannot functionally participate in an auction designed for utility scale systems. Bidding requirements are too complex and transaction costs are too high to justify participation for small projects. In precluding participation by this sector of the market, Illinois will lose out on a valuable investment opportunity that would otherwise yield measurable, long-term benefits for the state.

### II. A DISTRIBUTED SOLAR PROCUREMENT IS CONSISTENT WITH THE OBJECTIVES OF THE IPA ACT AND WOULD PROVIDE BENEFITS FOR **ILLINOIS**

For the reasons discussed below, a distributed solar procurement would provide additional benefits to the electric grid, would support job growth and economic development consistent with the legislative intent of the Illinois RPS and Solar Carve Out, 13 and would be fully consistent with the IPA's statutory mandate to "ensure adequate, reliable, affordable, efficient and environmentally sustainable" electric service at the "total lowest cost over time." <sup>14</sup> Section III below ("Recommended Action") provides specific recommendations and replacement language to accomplish these goals.

### A. Distributed Solar Reduces Price Risk and Provides Benefits to the Electric Grid

The "declarations and findings" of the IPA Act discuss the General Assembly's intent to promote the reliability and efficiency of the electric grid and avoid unnecessary transmission and

<sup>&</sup>lt;sup>12</sup> Sherwood at 4.

<sup>13</sup> 20 ILCS 3855/1-75(c).

<sup>&</sup>lt;sup>14</sup> 220 ILCS 5/16-111.5(d)(4).

distribution infrastructure costs.<sup>15</sup> Distributed solar systems have special attributes that further these legislative purposes and distinguish them from utility-scale projects. Distributed solar is interconnected directly to the distribution grid, and does not require investments in the transmission system. It can be installed close to load centers, improving the efficiency of electric deliveries by reducing line losses and improving grid stability and reliability by mitigating congestion during peak demand periods.

The Procurement Plan must include "an assessment of the price risk... associated with the proposed procurement plan... [and] shall also identify alternatives for those portfolio measures that are identified as having significant price risk." The IPA has recognized that "[i]nclusion of demand response and energy efficiency as alternative products within the IPA procurement events could serve as effective tools in addressing price responsiveness and load shape." Distributed solar can serve a similar role.

Because solar PV energy production has a high coincidence factor with peak demand, distributed solar, like utility-scale solar, can substitute as peaking resources for natural gas-fueled plants, which "are the marginal producers during the summer months in both PJM and MISO." As peaking resources with zero fuel costs, solar PV systems provide a valuable hedge against natural gas price volatility, either due to regulatory risk or the possibility that extracting shale gas resources will not be as easy and inexpensive as originally thought. 20

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<sup>&</sup>lt;sup>15</sup> See 20 ILCS 3855/1-5.

<sup>&</sup>lt;sup>16</sup> IPA Draft Plan at 5.

<sup>&</sup>lt;sup>17</sup> IPA Draft Plan at 8-9.

<sup>&</sup>lt;sup>18</sup> Id. at 10.

<sup>&</sup>lt;sup>19</sup> Id.

<sup>&</sup>lt;sup>20</sup> See Urbina, Ian, "Insiders Sound an Alarm Amid a Natural Gas Rush." New York Times, June 25, 2011. http://www.nytimes.com/2011/06/26/us/26gas.html? r=2

### **B.** Distributed Solar is Cost-Effective

The RPS requires the IPA to procure "cost-effective" renewable energy resources.<sup>21</sup> As discussed below, the cost of solar is falling rapidly and the IPA could structure a distributed solar PV procurement program to ensure that SRECs procured from distributed systems are competitive with the winning bids in a utility-scale auction.

The installed cost of solar PV has declined precipitously in recent years. 2010 was no different. The chart below from the Solar Energy Industries Association's U.S. Solar Market Insight - 2010 Year in  $Review^{22}$  highlights the decline in installed costs.



The chart on page 49 of the Draft Plan illustrates the sharp decline in SREC prices since January 2011.<sup>23</sup> In large part, these price declines reflect the steeply falling prices for solar modules on the global market due to an aggressive ramp up of manufacturing capacity. However, the U.S. Department of Energy estimates that non-module costs can represent up to

<sup>&</sup>lt;sup>21</sup> 20 ILCS 3855/1-75(c).

<sup>&</sup>lt;sup>22</sup> Available at <a href="http://www.seia.org/cs/research/SolarInsight">http://www.seia.org/cs/research/SolarInsight</a>

<sup>&</sup>lt;sup>23</sup> IPA Draft Plan at 49.

40% of the overall installed costs of a solar PV array,<sup>24</sup> so states with a mature and competitive PV labor market will tend to have lower costs overall. In an open docket before the Michigan Public Service Commission concerning Detroit Edison's SolarCurrents Program, Solar Alliance Executive Director Carrie Cullen Hitt testified: "In addition to component costs, system price is a function of market maturity, labor costs, and system size. The more established and larger the state market is the more likely developers will enter the state creating downward pressure on prices."<sup>25</sup>

Though economies of scale do typically result in lower installed costs for utility-scale systems versus smaller, distributed systems, this does not necessarily mean that the IPA would need to pay more for SRECs from distributed systems to motivate participation in a distributed solar program. In fact, the IPA could structure the program to ensure that prices are competitive. The individual people and businesses that invest in small, distributed solar systems may be assigning value to environmental and other non-economic attributes, and may therefore tolerate a lower profit margin than the commercial investors behind large-scale utility projects. Two distributed solar programs in neighboring states illustrate this point. Consumers Energy in Michigan recently released program details for the third phase of its popular Experimental Advanced Renewable Energy Program (the "EARP"). Consumers Energy will offer rates of \$0.20-\$0.26 per kWh for 15-year contracts for solar output (including SRECs plus energy). Similarly, the Indiana Regulatory Commission recently approved a tariff filing by Northern Indiana Public Service Company (NIPSCO) to offer \$0.26-\$0.30 per kWh with a 2% per year

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U.S. Department of Energy, "SunShot Initiative – Solar Rooftop Challenge to Induce Market Transformation
 Funding Opportunity Announcement," Page 10. Issued June 1, 2011. <a href="https://eere-exchange.energy.gov/Default.aspx#d7fc28a9-cd94-4548-b0ea-4713432c90fd">https://eere-exchange.energy.gov/Default.aspx#d7fc28a9-cd94-4548-b0ea-4713432c90fd</a>
 See Direct Testimony of Carrie Cullen Hitt on Behalf of the Environmental Law & Policy Center at 8. Filed June

<sup>&</sup>lt;sup>25</sup> See Direct Testimony of Carrie Cullen Hitt on Behalf of the Environmental Law & Policy Center at 8. Filed June 29, 2011. Case No. U-16582, Michigan Public Service Commission. http://efile.mpsc.state.mi.us/efile/docs/16582/0075.pdf

price escalator for 15-year contracts for solar output (including SRECs *plus energy*). When contract prices are compared on an NPV basis, the rates these utilities will pay for distributed SRECs are competitive with the December 2010 LTPPA prices for utility-scale solar in Illinois.

# C. Distributed Solar will Support Sustainable Job Growth and Economic Development

The General Assembly considered job creation to be an important purpose of the Illinois RPS and, especially, the "ramped-up" solar requirements that were adopted in the 2010 legislative session.<sup>26</sup> In fact, the bill's sponsor highlighted this purpose in the floor debate immediately before the House voted 94-17 to advance HB 6202:

We're all trying to create jobs and economic opportunity here in the State of Illinois, we've talked a lot about that this Session. This is another bill that will go a long way to creating jobs for hardworking people throughout the State of Illinois, reduce our reliance on . . . other kinds of energy, move the state forward tech[nologically] in creating new kinds of energy through solar, and make sure we have balance in our renewable energy portfolio.<sup>27</sup>

Illinois' net metering law similarly encourages development of distributed generation in order to "encourage private investment in renewable energy resources, stimulate economic growth, enhance the continued diversification of Illinois' energy resource mix, and protect the Illinois environment." Importantly, the net metering statute assigns ownership of RECs produced from distributed generation (DG) systems to the system owners. Because the IPA lacks an effective DG procurement strategy, the owners of DG systems currently have no ability to sell their RECs in Illinois.

<sup>28</sup> 220 ILCS 16-107.5.

<sup>&</sup>lt;sup>26</sup> See generally House Debate on H.B. 6202, 96<sup>th</sup> Gen. Assemb., Reg. Session, at pp. 174-183 (Ill. May 26, 2010), available at <a href="http://www.ilga.gov/house/transcripts/htrans96/09600142.pdf">http://www.ilga.gov/house/transcripts/htrans96/09600142.pdf</a> (indicating intent of bill sponsor Rep. Burns to promote job creation).

<sup>&</sup>lt;sup>27</sup> Id. at 183.

<sup>&</sup>lt;sup>29</sup> 220 ILCS 16-107.5(g).

Distributed solar development will create new job and investment opportunities in A widely-cited study by the Energy and Resources Group at the University of Illinois. California, Berkeley concluded: "Among the common RPS technologies, solar photovoltaics (PV) creates the most jobs per unit of electricity output."<sup>30</sup> Furthermore, a study conducted for the U.S. Department of Energy showed that distributed solar produces more jobs per MW than utility-scale solar projects.<sup>31</sup> A summary of the estimated job creation and economic development benefits from 60 MW of distributed solar installed in Illinois is below.

Economic Metrics – 60 MW of Distributed Solar in IL	Jobs (1)	Earnings	Output (2)
<b>During construction and Installation Period</b>			
Project Development and Onsite Labor Impacts	613	\$36,243,000	\$52,382,000
Module and Supply Chain Impacts	1052	\$59,824,000	\$164,120,000
Induced Impacts (3)	683	\$27,971,000	\$84,586,000
Ongoing O&M jobs (4)	125	\$8,616,000	\$8,616,000
Total Construction, Installation, Supply and O&M Jobs	2353	\$132,653,000	\$309,704,000

Per-MW benchmarks were generated by the Vote Solar Initiative, using the National Renewable Energy Laboratory's Jobs and Economic Development Impact (JEDI) model.<sup>32</sup>

- (1) Job numbers are reported as 1 job = 1 full-time-equivalent for a period of 1 year.
- (2) Output = all economic activity related to the project.
- (3) Refers to jobs that result from income spent by workers involved in project development, onsite labor, module and supply chain.
- (4) O&M jobs, earnings and output are calculated over the lifetime of the solar installation (est. 25 years).

In ELPC's July 2011 study of the clean energy supply chain in Illinois, we identified more than 95 companies in the Illinois solar power supply chain even now, before investment in this market has really begun.<sup>33</sup> The growth potential is enormous. In 2010 alone, the U.S. solar market grew to reach \$6 billion, up 67% from \$3.6 billion in 2009. The number of grid-

<sup>&</sup>lt;sup>30</sup> Wei, Max, Shana Patadia and Daniel M. Kammen, "Putting renewable and energy efficiency to work: How many jobs can the clean energy industry generate in the US?" Energy Policy 38 (2010) 919–931.

http://rael.berkeley.edu/sites/default/files/WeiPatadiaKammen CleanEnergyJobs EPolicy2010 0.pdf

31 Vote Solar Comments on the IPA's 2011 Draft Procurement Plan at 4 (September 14, 2010) citing Navigant Consulting, "Economic Impacts of Extending the Solar Investment Tax Credit" (September 15, 2008). http://www.seia.org/galleries/pdf/Navigant%20Consulting%20Report%209.15.08.pdf

<sup>&</sup>lt;sup>32</sup> National Renewable Energy Laboratory, Jobs and Economic Development Impact (JEDI) Model, PV Model, http://www.nrel.gov/analysis/jedi/download.html

<sup>33</sup> Environmental Law & Policy Center, "The Clean Energy Supply Chain in Illinois: Wind, Solar and Geothermal." July 2011. http://elpc.org/wp-content/uploads/2011/07/ILCleanEnergySupplyChain07.11.small .pdf

connected PV installations grew by 102% in 2010, shattering the 10-year annual average growth rate of 69%.<sup>34</sup> State policy is the key factor that determines where in the U.S. this growth takes place. To date, Illinois has not been a major beneficiary of this growth, but that would change almost overnight if the IPA were to adopt a policy framework aimed at driving long-term, sustainable development in the solar energy industry.

### III. RECOMMENDED ACTION

For all of the above reasons, we respectfully recommend that the IPA modify the Draft Plan to include language stating affirmatively that the Agency will (1) create a procurement program to procure at least 25% of any Plan Year's solar renewable energy requirement from SRECs from small and mid-size distributed solar energy systems (approximately 3 MW in 2012, 10 MW in 2013, 48 MW in 2014, 52 MW in 2016...); (2) announce procurement program features and design details no later than June 1, 2012; (3) initiate the first procurement event for distributed SRECs no later than December 1, 2012; (4) implement the distributed solar procurement program over multiple years to encourage sustainable, long-term growth of Illinois' solar industry.

With these objectives firmly established in the Procurement Plan, the IPA should hold a series of workshops beginning in January 2012 and concluding in May 2012 to seek stakeholder input on program features and implementation procedures. Many states, municipalities and utilities across the country have recognized the diverse values conveyed by distributed solar and, as a result, there are a variety of strong model programs for Illinois to draw lessons from. ELPC

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<sup>&</sup>lt;sup>34</sup> Solar Energy Industries Association (SEIA), "U.S. Solar Market Insight – 2010 Year in Review." <a href="http://www.seia.org/galleries/pdf/SMI-YIR-2010-ES.pdf">http://www.seia.org/galleries/pdf/SMI-YIR-2010-ES.pdf</a>

favors two potential program design models, both of which have manageable administrative requirements and would provide the structure to achieve robust development at prices that are competitive with the utility-scale solar auction results.

The first program type would combine the features of a competitive auction mechanism with a fixed price, standard offer contract program. The utilities (perhaps via a third party administrator) would offer owners and developers of distributed solar systems in Illinois 10- or 15-year fixed price contracts for SRECs. The SREC contract price for the initial procurement window would be based on the clearing price of the previous utility-scale solar auction.<sup>35</sup> The contract price offered could be adjusted in subsequent procurement windows to make sure that prices track the market over time. The second program type would rely on a more traditional competitive auction mechanism, but participants would be limited to aggregators of SRECs from small and midsize distributed solar PV systems in Illinois. Aggregators would develop and own solar PV systems at multiple locations, or would contract to buy SRECs from multiple solar system owners, and would compete to sign 10- or 15-year contracts with the utilities (perhaps via a third-party administrator) for those aggregated SRECs. Both programs would offer Illinois solar systems owners and operators transparent selling opportunities for their SRECs with contracts of sufficient duration to provide for stable investment returns and enable third-party financing and ownership models. We recommend that the IPA design a procurement program based on one or both of these models, and initiate a series of workshops to determine program design features and details.<sup>36</sup>

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<sup>&</sup>lt;sup>35</sup> The IPA could consider whether to adjust the market clearing price upwards to account for the additional value to the electric grid provided by distributed solar.

<sup>&</sup>lt;sup>36</sup> The IL RPS, including the Solar Carve Out, also applies to Alternative Retail Electric Suppliers (ARES) as well as utilities. Although these comments only apply to the utilities' compliance obligation (via IPA), the same program could be used to procure distributed SRECs for the ARES' compliance obligations as well.

### IV. REPLACEMENT LANGUAGE

**2.3.1.2 Load Uncertainty.** The portfolio is exposed to load uncertainty risk due to inelasticity of demand among many portfolio participants, and the unknown pace of migration of eligible customers to ARES suppliers over time. As noted in the above, the policy of the State of Illinois is to support electricity choice and competitive retail markets with the IPA portfolio of fixed price contracts serving as the "default" rate provider.

Consumption by bundled service customers is relatively inelastic, meaning that consumption does not diminish significantly when prices are high. This is due in large part to current tariff structures that do not expose customers to price variance. Inelasticity of demand represents risk insofar as portfolio participants who do continue to use large volumes of electricity when prices are high (e.g., running air conditioning units during hot summer afternoons) do not carry the full direct cost of their usage. Instead, the cost of their consumption during high cost periods is averaged across the entire portfolio. Inclusion of demand response and energy efficiency and distributed solar PV as alternative products within the IPA procurement events could serve as effective tools in addressing price responsiveness and load shape.

**2.3.1.5 Fuel Costs.** Fuel costs present risk to the portfolio insofar as fuel costs are a primary drivers of generation costs except for renewable resources like wind and solar.

**2.3.1.7 Transmission Costs.** The Utilities operate in separate regional transmission organization ("RTO") markets: Ameren in MISO and ComEd in PJM. Risks associated with these markets are new transmission asset related costs, tariff rules, and the potential for cost sharing on super-regional transmission lines.

The IPA is limited in its ability to mitigate these growing risks outside of factoring them into cost modeling over the longer range horizon and seeking offsetting cost avoidance elsewhere within the Portfolio, for example, through investments in distributed resources.

**3.5.6 Recommendations.** More than any other section of the Draft Plan, the IPA seeks inputs on the following recommendations from consumers, renewable asset developers, Utilities, and regulators.

The IPA recommends the following method to be used to meet the RPS obligations for the 2012-2013 compliance year and beyond:

- Establish a conservative Renewable Resources Budget for 20 years
  - Estimate the annual portfolio requirements for the next 20 years. Utilize current Utility Low Scenario projections to establish portfolio volumes for the first five year, then continue those projections trendlines over the next 15 years. The result will be a portfolio volume that represents the highest level of estimated consumer switching away from the IPA portfolio;
  - Consistent with the Act, apply the Rate Cap to the 20 year volumes to establish annual Renewable Resource Budgets (RRBs) for each year in the series;
  - Apply the confidential future price curve generated by the IPA and submitted to the ICC to back out Long Term Power Purchase Agreements (LTPPA) cost obligations from the RRB to yield a Net Renewable Resources Budget (NRRB) for each of the future years.
  - Factor each annual NRRB by 50% and solicit RECs bids for up to the 20 year horizon using the factored NRRB as a hard budget limit.
  - Conduct procurements that yield carve-out consistent contracts for solar and wind.
  - Invite bids for periods of up to 20 years from renewable generators (allow single year as well as multi-year bids for resources)
  - Select only those bids that fit beneath the NRBB

- Sort bids according to price and source (solar, wind, etc.)
- Select bids in a manner that yields at least the minimum carve out requirements are met when the LTPPA volume are added to the new REC volumes.
- Conduct a procurement of distributed SRECs for no less than 25% of the solar renewable energy procurement obligation.

The proposed approach would facilitate offers from short term REC bidders seeking contracts for low price RECs who would be more likely to bid into the near years of the 20 year period. Longer term offers would be possible insofar as the costs of those bids coupled with existing LTPPAs do not over-obligate the RRB. In addition to the above, the IPA recommends the following:

Distributed SRECs. The IPA shall design the procurement program for distributed SRECs between January - May 2012, announce the program in June 2012 and initiate the first procurement event by December 2012. The procurement program will be designed to enable the utilities to sign long-term (at least 10-year) contracts for SRECs from distributed solar systems in Illinois at prices that are competitive with the average SREC clearing price from the procurement process described above. The IPA will consider the following broad program types:

- A fixed price, long-term, standard offer contract program in which initial contract prices are based on the auction clearing prices for SRECs from the IPA's Spring 2012 auction, and contract price offers are adjusted over time to track the market;
- (2) An auction for long-term SREC contracts in which participation is limited to aggregators of SRECs from multiple small and mid-size distributed solar systems in Illinois.

In order to design and announce the distributed SREC procurement program by June 2012 and initiate the first procurement event by December 2012, the IPA will host a series of workshops between January - May 2012. IPA will invite input from the public, including policy experts and solar industry stakeholders to address major program design features and other issues, including:

- <u>Definitions for "small" and "mid-size" distributed solar systems eligible to participate in the procurement.</u>
- The terms and conditions under which distributed SREC providers would verify SREC deliveries
- Administrative procedures that minimize transaction costs for participants and administrative burdens for the utilities and the IPA
- A process for assessing program results, including the energy and capacity values of the distributed solar energy developed as a result of the program, and the benefits to the Illinois distribution grid.
- A process for modifying the program over time.

For purposes of this Draft Plan, "distributed SREC" is intended to mean the renewable energy credit associated with the output of a solar PV system interconnected to the electric distribution system in Illinois and located on the customer's side of the electric meter.

## Respectfully submitted,

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